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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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03/26/2004

Masayuki Tsuda

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8154

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EXAMINER

SAMS, MATTHEW C

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

04/14/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/810,499	<b>Applicant(s)</b> TSUDA ET AL.	
	<b>Examiner</b> MATTHEW C. SAMS	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 March 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-9 and 12-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-9 and 12-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

1. This office action is in response to the arguments filed on 3/6/2008.
2. No claim amendments were filed.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 5, 8, 9, 12, 16, 18, 20, 22-24, 27, 29-32, 35 and 37-39 are rejected under 35 U.S.C. 102(a & e) as being anticipated by Hikishima (US-7,190,977).

Regarding claim 5, Hikishima teaches a terminal device (Fig. 1A-1C) which knows it is multitasking (Fig. 5 [S11] *i.e.* waiting for a call and playing a game), comprising:

processing means (Fig. 2 [18]) for detecting one of a predetermined set of events (Fig. 5 [S12]) that cause operation of an application to suspend (Fig. 5 [S13]), the processing means (Fig. 2 [18]) operable to generate event data indicative of a cause of

suspension of the application program; (Fig. 5 [S21] Yes *i.e.* choosing the incoming phone call over playing the game)

the processing means (Fig. 2 [18]) further operable to suspend operation (Fig. 5 [S13]) of an application program when an event is detected; (Fig. 5 [S12 & S13] Yes *i.e.* the game is paused because a call is received and the phone is ringing) and

storage means (Fig. 2 [16]) for storing the event data (Fig. 5 [S21] Yes *i.e.* choosing the incoming phone call over playing the game) generated by the processing means (Fig. 2 [18]); and

the processing means (Fig. 2 [18]) is further operable to deliver the stored event data (Fig. 5 [S21] Yes *i.e.* the reason why the game was paused, the incoming call, has been ended, Fig. 5 [S24 & S25]) to the resumed application program to adjust further operation of the resumed application program to be responsive to the cause of the suspension. (Fig. 5 [S26, S27 & S28] *i.e.* the call has ended, so the game can now be resumed or not resumed and the phone can go back to waiting for a call) Note: The program knows to ask the user whether or not to resume the game because the program knew the device was multi-tasking.

Regarding claim 8, Hikishima teaches a program product useable with a computer device (Fig. 1A-1C) comprising:

a computer readable medium (Fig. 2 [16]) encoded with a computer program that is executable by a processor (Fig. 2 [18] and Fig. 5) to cause (Col. 6 lines 43-49):

detecting one of a predetermined set of events (Fig. 5 [S12]) that cause operation of an application to suspend; (Fig. 5 [S13])

suspending operation of the application program (Fig. 5 [S13]) when an event is detected that is in the predetermined set of events; (Fig. 5 [S12 & S13] Yes *i.e.* the game is paused because a call is received and the phone is ringing)

generating event data indicative of a cause of suspension of the application program; (Fig. 5 [S21 "Y" & S22])

storing the event data; (Fig. 5 [S22])

resuming operation of the application program that was suspended (*i.e.* the phone goes back to waiting for a call) and delivering the event data (Fig. 5 [S21] Yes *i.e.* the reason why the game was paused, the incoming call, has been ended, Fig. 5 [S24 & S25]) to the resumed application program to adjust further operation of the resumed application program to be responsive to the cause of the suspension. (Fig. 5 [S26, S27 & S28] *i.e.* the call has ended, so the game can now be resumed or not resumed)

Regarding claim 9, Hikishima teaches a terminal device (Fig. 1A-1C) comprising:  
a memory; (Fig. 2 [16])

instructions stored in the memory (Col. 6 lines 43-49) to detect receipt of a first predetermined event; (Fig. 5 [S12] *i.e.* incoming call)

instructions stored in the memory (Col. 6 lines 43-49) to suspend operation of an application that is currently being executed; (Fig. 5 [S13] *i.e.* halt game in order to alert user of the incoming call)

instructions stored in the memory (Col. 6 lines 43-49) to store event data indicating the cause of suspension of the application; (Fig. 5 [S21] Yes *i.e.* choosing the incoming phone call over playing the game and Fig. 5 [S22] *i.e.* storing the game data)

instructions stored in the memory (Col. 6 lines 43-49) to initiate resumption of execution of the application in response to a second predetermined event; (Fig. 5 [S24-S25] *i.e.* line disconnected, resume waiting for a call)

instructions stored in the memory (Col. 6 lines 43-49) to extract the stored event data; (Fig. 5 [S21] Yes *i.e.* the reason why the game was paused, the incoming call, has been ended, Fig. 5 [S24 & S25])

instructions stored in the memory (Col. 6 lines 43-49) to resume execution of the application, in accordance with the extracted event data; (begin waiting for a new call & Fig. 5 [S26]) and

instructions stored in the memory to generate a message with the resumed application that notifies a user of the first predetermined event. (Fig. 5 [S26] *i.e.* call has ended, do you want to resume the game?)

Regarding claim 12, Hikishima teaches wherein instructions stored in the memory to generate a message comprise instructions stored in memory to generate a query to a user that is related to the first predetermined event. (Fig. 5 [S26] *i.e.* call has ended, do you want to resume the game?)

Regarding claim 16, Hikishima teaches the first predetermined event comprises receipt by the terminal device of an email or a call request. (Fig. 5 [S13])

Regarding claim 18, Hikishima teaches the first predetermined event comprises execution of another application by the application. (Fig. 5 [S13] *i.e.* ring tones for phone call alert)

Regarding claim 20, Hikishima teaches the second predetermined event comprises a user command. (Fig. 5 [S24-S25] *i.e.* user terminates call by pressing button)

Regarding claim 22, Hikishima teaches the second predetermined event comprises completion of the first predetermined event. (Fig. 5 [S24 & S25])

Regarding claim 23, Hikishima teaches instructions stored in memory to suspend the application comprises instructions stored in the memory to, during the suspension, maintain application related data in volatile memory that was input by a user prior to suspension. (Fig. 5 [S22], Col. 6 lines 14-15 and lines 25-28)

Regarding claim 24, Hikishima teaches instructions stored in memory to suspend the application comprises instructions stored in memory to maintain the suspended application in volatile memory during the suspension. (Fig. 2 [16], Fig. 5 [S22], Col. 6 lines 14-15, lines 25-28 and lines 43-49)

Regarding claim 27, Hikishima teaches instructions stored in memory to store the application in volatile memory when the application is launched, and instructions stored in memory to suspend the application comprises instructions stored in memory to maintain the application in the volatile memory until execution is resumed. (Fig. 2 [16], Fig. 5 [S11 & S22], Col. 6 lines 14-15, lines 25-28 and lines 43-49)

Regarding claim 29, Hikishima teaches a display means for displaying information to a user (Fig. 2 [6 & 12]), the display means operable to display a message related to the cause of the suspension (Fig. 5 [S17 & S20]), the resumed application

program operable to generate the message in response to receipt of the delivered stored event data. (Fig. 5 [S24, S25 & S26])

Regarding claim 30, the limitations of claim 30 are rejected as being the same reason set forth above in claim 23.

Regarding claim 31, Hikishima teaches the resumed application program is configured to generate a message to notify a user of the cause of the suspension based on the stored event data. (Fig. 5 [S24, S25 and S26])

Regarding claims 32 and 38, the limitations of claims 32 and 38 are rejected as being the same reasons set forth above in claim 16.

Regarding claim 35, Hikishima teaches the data related to the application program that is input by the user remains in random access memory after operation of the application program is suspended. (Fig. 2 [16], Fig. 5 [S22], Col. 6 lines 14-15, lines 25-28 and lines 43-49)

Regarding claim 37, the limitations of claim 37 are rejected as being the same reason set forth above in claim 35.

Regarding claim 39, the limitations of claim 39 are rejected as being the same reason set forth above in claim 35.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the



invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6, 7, 13-15, 17, 19, 21, 28, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hikishima in view of Monnes et al. (US-6,459,440 hereinafter, Monnes).

Regarding claim 6, Hikishima teaches the limitations of claim 5 above, but differs from the claimed invention by not explicitly reciting the storage means is operable to store sets of event data each representing an event between the time period from the time of suspension of operation of the application program by the processing means and the time that operation of the application program is resumed by the processing means.

In an analogous art, Monnes teaches a terminal device (Fig. 1 [12]) that is capable of running multiple programs (Fig. 1 [Application Message N]) which includes a storage means (Fig. 1 [32]) operable to store sets of event data (Fig. 1 [Application Message N]) that accumulates as the events occur. (Fig. 1 [19] "You have 3 new messages" and Col. 1 line 57 through Col. 2 line 3) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to be motivated to implement the multitasking terminal device of Hikishima after modifying it to incorporate the event accumulating of Monnes since it would make no sense to have a device that receives messages but did not tell the user how many new messages have been received since the last time the user looked at the device or alternatively, while the user has been operating a different application on the terminal. (Monnes Col. 1 lines 44-61)

Regarding claim 7, Hikishima teaches a communication means (Fig. 2 [15]) for communicating via a communication network, and wherein:

the processing means (Fig. 2 [18]) is operable to suspend operation of the application program (Fig. 5 [S11] *i.e.* game) when the communicating means receives a call designating a user of the terminal device. (Fig. 5 [S13]) Hikishima differs from the claimed invention by not explicitly reciting the suspension occurs because a message is received.

In an analogous art, Monnes teaches receiving short messages and accumulating the number of messages received. (Col. 1 lines 44-61) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to be motivated to implement the terminal device of Hikishima after modifying it to incorporate the receiving of short messages of Monnes since using short messages for communications on a mobile device is well known in the art. (Col. 1 line 44-61)

Regarding claim 13, Hikishima in view of Monnes teaches instructions stored in the memory to generate a message comprises instructions stored in memory to generate a query to a user to launch another application to attend to the first predetermined event. (Monnes Fig. 2 [21] "Read now")

Regarding claim 14, Hikishima in view of Monnes teaches the message comprises an audio message. (Hikishima Fig. 5 [S13])

Regarding claim 15, Hikishima in view of Monnes teaches the message comprises a text message. (Monnes Fig. 2 [10 & 19])

Regarding claim 17, Hikishima in view of Monnes teaches the first predetermined event comprises receipt or transmission by the terminal device of data via a short range transmission. (Monnes Col. 1 lines 44-61)

Regarding claim 19, the limitations of claim 19 are rejected as being the same reason set forth above in claim 6.

Regarding claim 21, Hikishima in view of Monnes obviously teaches the second predetermined event comprises expiration of a determined time period since the notification of an incoming call only occurs for a specified period before the call is directed to a voicemail service.

Regarding claim 28, Hikishima in view of Monnes teaches instructions stored in memory to delete the stored event data when execution of the application is resumed. (Hikishima Fig. 5 [S28] and Monnes Col. 5 lines 35-49)

Regarding claim 33, Hikishima in view of Monnes teaches the response to the event being receipt of an email message, the processing means is further configured to resume operation of the suspended application program after a specified time has elapsed following display of the message. (Monnes Fig. 6 [56, 58, 62 and 64])

Regarding claim 34, Hikishima in view of Monnes teaches the processing means is further configured to generate difference messages dependent on the cause of the suspension. (Hikishima Fig. 5 [S13], Monnes Fig. 1 [19] and Col. 1 lines 57-61)

7. Claims 25, 26, 36 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hikishima.

Regarding claims 25, 26 and 36, Hikishima teaches the limitations of claims 5 and 9 above, but differs from the claimed invention by not explicitly reciting the use of a flag, an identifier or storing the identifier in a table. However, one of ordinary skill in the art would recognize the use of flags, identifiers and organizing information in tables as being well known in the art and easily implemented in software design, therefore the rejection of claims 25, 26 and 36 are maintained as being obvious in view of the specific citations related to claims 5 and 9 above.

Regarding claims 40-42, Hikishima teaches the limitations of claims 5, 8 and 9 above, but differs from the claimed invention by not explicitly reciting the use of a flag, an identifier or storing the identifier in a table. However, one of ordinary skill in the art would recognize the use of flags, identifiers and organizing information in tables as being well known in the art and easily implemented in software design, therefore the rejection of claims 40-42 are maintained as being obvious in view of the specific citations related to claims 5, 8 and 9 above.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 5-9 and 12-42 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW C. SAMS whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571)272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

MCS  
3/27/2008